

US EPA ARCHIVE DOCUMENT



MSD/ISB
1745

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

11 AUG 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: Dichlorvos (DDVP)- Tolerance Assessment/Quantitative Risk Assessment. Addendum to the Registration Standard.

To: Amy Rispin
Science Integration Staff
Hazard Evaluation Division

From: C. Frick
Tolerance Assessment Program
Residue Chemistry Branch, HED

Thru: Charles L. Trichilo, Ph.D.
Chief, Residue Chemistry Branch
Hazard Evaluation Division

C. Frick 8/10/87

DX
8/10/87

Tolerance Assessment System (TAS) Program has been requested by the Science Integration Staff (SIS) to perform a tolerance assessment and quantitative risk assessment factoring in values for percent of crop treated and anticipated residues.

TOLERANCE ASSESSMENT

CHEMICAL: DICLORVOS (DDVP)

1. The Provisional Acceptable Daily Intake (PADI) for this chemical is 0.0008 mg/kg/day, and has been approved by the Toxicology Branch Reference Dose Committee.

In addition, this chemical has been identified as an oncogen in the rat and mouse. The (Q^*) of DDVP is 2.9×10^{-1} (mg/kg/day) $^{-1}$ (memo. Carol Monroe, SIS).

2. The food uses evaluated by the Tolerance Assessment System (TAS) were published tolerances established under CFR 180.235. Some of the published tolerance values were expressed in terms of the pesticide Naled; in this analysis these values were calculated in terms of DDVP.

3. The Science Integration Staff (SIS) requested information from the Economic Analysis Branch (BUD) on the percent of crops treated with DDVP. The TAS analysis has factored in these data along with data submitted by RCB reflecting anticipated residues of DDVP. The results are found in the analytical summary sheet (page 1a) under the heading "Effects of Anticipated Residues". A comparsion of the analytical results using published tolerance residue values, and factoring in the values of anticipated residues and percent of crops treated has been made.

4. Evaluation of DDVP uses relative to the PADI (Published Tolerance Values): The TMRC for the U.S. population average is 0.004302 mg/kg/day, equivalent to 538% of the PADI. The most highly exposed subgroups are non-nursing infants (0.011804 mg/kg/day, equivalent to 1475% of the PADI). and children 1-6 years of age (0.009048 mg/kg/day, equivalent to 1131% of the PADI).

Evaluation of DDVP uses relative to the PADI (factoring in anticipated residue levels and percent of crops treated): The Anticipated Residue Concentration (ARC) for the U.S. population average is 0.000416 mg/kg/day, which is equivalent to 52% of the PADI. The most highly exposed subgroups are non-nursing infants (0.001522 mg/kg/day, which is equivalent to 190% of the PADI) and children 1-6 years of age (0.000976 mg/kg/day, equivalent to 122% of the PADI).

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4. Calculation of oncogenic risk: Risk was calculated only for the U.S. population in accordance with current HED policy. This value was calculated as:

$$\text{RISK} = \text{EXPOSURE} \times Q^*$$

Using Published Tolerance Values only:

$$\begin{aligned} & 0.004302 \times (2.9 \times 10^{-1}) \\ \text{or } & 4.3 \times 10^{-3} \times 2.9 \times 10^{-1} = \underline{1.3 \times 10^{-3}} \end{aligned}$$

Using Published Tolerances, and factoring by anticipated residues and percent of crop treated, the risk was calculated as:

$$\begin{aligned} & 0.000416 \times (2.9 \times 10^{-1}) \\ \text{or } & 4.2 \times 10^{-4} \times 2.9 \times 10^{-1} = \underline{1.2 \times 10^{-4}} \end{aligned}$$

Discussion

For calculation of anticipated residues in the TAS analyses, the published tolerance values were factored by values for percent of crop treated and processing data, when such data was available. It must be pointed out that much of the data on percent of crop treated was derived from indirect inference and cannot be considered as solid data. The following must be noted:

1. Besides the tolerances on specific crops listed in CFR 180.235, tolerances are established for the residues of DDVP on bulk stored nonperishable RACs and packaged or bagged non-perishable RACs and processed foods. The foods in this category, without adjusting for percent of crop treated or anticipated residues, contribute 68% of the TMRC.

2. As calculated in the TAS analysis, the value used for percent of these crops treated was 7.5%. This percentage was the value given by BUD as the average percentage of processors using DDVP, 6/84 through 6/85 (memo. Ed Brandt, 7/29/87). However, this use information is only relevant to food processors. The tolerances also cover registered uses on bulk storage facilities such as warehouses and railroad storage; no information is available on the percent use of DDVP at these locations.

Finally, since the treatment of food occurs at the distribution level, the use of % crop treated correction for this use is debatable. The distribution of residues will not be random, and it is likely that within a given regional distribution area, most of the food will be treated.

4. It must be concluded, that with the sparsity of quantitative data available to TAS on this type of categorical treatment with DDVP, the value of 7.5% crop treated in this treatment category must be considered as arbitrary.

ATTACHMENT

cc. Registration Standard File
Reading File
Circ.
TAS File
C. Frick (RCB)
D. Edwards (RCB)
Toxicology Branch
PMSD

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 08/05/87

PAGE: 1a

| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|---|---|---|---|--|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg 3.20 ppm LEL= 0.8000 mg/kg 32.00 ppm ONCQ: Class B2 (TOX NOTE) | Increased liver weights, enlarged hepatocytes, no effect on ChE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI = 100 OPP RfD= 0.000800 EPA RfD= 0.002500 WHO RfD 0.004000 Type: ADI | Chronic feeding- rat (Core-Supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |

| POPULATION SUBGROUP | TOTAL TMRC (MG/KG BODY WEIGHT/DAY) | | NEW TMRC AS PERCENT OF RFD | DIFFERENCE AS PERCENT OF RFD | EFFECT OF ANTICIPATED RESIDUES (MG/KG/DAY) | %RFD |
|---|------------------------------------|------------|----------------------------------|------------------------------------|---|------------|
| | CURRENT TMRC* | NEW TMRC** | | | | |
| U.S. POPULATION - 48 STATES | 0.004302 | 0.004302 | 537.724000 | 0.000000 | 0.000416 | 52.008500 |
| U.S. POPULATION - SPRING SEASON | 0.004153 | 0.004153 | 519.094250 | 0.000000 | 0.000402 | 50.305750 |
| U.S. POPULATION - SUMMER SEASON | 0.004346 | 0.004346 | 543.247500 | 0.000000 | 0.000414 | 51.803500 |
| U.S. POPULATION - FALL SEASON | 0.004349 | 0.004349 | 543.649750 | 0.000000 | 0.000426 | 53.281750 |
| U.S. POPULATION - WINTER SEASON | 0.004312 | 0.004312 | 539.049000 | 0.000000 | 0.000421 | 52.648125 |
| NORTHEAST REGION | 0.004257 | 0.004257 | 532.173500 | 0.000000 | 0.000411 | 51.355375 |
| NORTH CENTRAL REGION | 0.004384 | 0.004384 | 548.053250 | 0.000000 | 0.000423 | 52.907125 |
| SOUTHERN REGION | 0.004072 | 0.004072 | 508.960250 | 0.000000 | 0.000404 | 50.515500 |
| WESTERN REGION | 0.004574 | 0.004574 | 571.800875 | 0.000000 | 0.000433 | 54.167000 |
| HISPANICS | 0.004807 | 0.004807 | 600.864625 | 0.000000 | 0.000499 | 62.387875 |
| NON-HISPANIC WHITES | 0.004337 | 0.004337 | 542.082125 | 0.000000 | 0.000408 | 51.056250 |
| NON-HISPANIC BLACKS | 0.003735 | 0.003735 | 466.932000 | 0.000000 | 0.000422 | 52.707125 |
| NON-HISPANICS OTHER | 0.004364 | 0.004364 | 545.543375 | 0.000000 | 0.000454 | 56.791625 |
| NURSING INFANTS (<1 YEAR OLD) | 0.003654 | 0.003654 | 456.717625 | 0.000000 | 0.000401 | 50.065625 |
| NON-NURSING INFANTS (<1 YEAR OLD) | 0.011804 | 0.011804 | 1475.508500 | 0.000000 | 0.001522 | 190.264625 |
| FEMALES (13+ YEARS, PREGNANT) | 0.003153 | 0.003153 | 394.077250 | 0.000000 | 0.000298 | 37.240000 |
| FEMALES 13+ YEARS, NURSING | 0.003773 | 0.003773 | 471.670625 | 0.000000 | 0.000354 | 44.302125 |
| CHILDREN (1-6 YEARS OLD) | 0.009048 | 0.009048 | 1130.974125 | 0.000000 | 0.000976 | 122.047000 |
| CHILDREN (7-12 YEARS OLD) | 0.006623 | 0.006623 | 827.852125 | 0.000000 | 0.000649 | 81.154250 |
| MALES (<13-19 YEARS OLD) | 0.004460 | 0.004460 | 557.511750 | 0.000000 | 0.000440 | 55.001250 |
| MALES (13-19 YEARS OLD, NOT PREG. OR NURSING) | 0.003718 | 0.003718 | 464.766500 | 0.000000 | 0.000353 | 44.162125 |
| MALES (20 YEARS AND OLDER) | 0.003314 | 0.003314 | 414.254250 | 0.000000 | 0.000304 | 38.004375 |
| FEMALES (20 YEARS AND OLDER) | 0.002986 | 0.002986 | 373.188250 | 0.000000 | 0.000263 | 32.928125 |

*Current TMRC does not include new or pending tolerances.
**New TMRC includes new, pending, and published tolerances.

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 328

DATE: 08/05/87

PAGE: 1

| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|--|---|--|---|--|
| Dichlorvos Gaswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg LEL= 3.20 ppm mg/kg | Increased liver weights, enlarged hepatocytes, no effect on CHE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP RfD= 0.000800 EPA RfD= 0.002500 | Chronic feeding- rat (Core-Supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. WHO verified 9/16/86. Last reviewed 1977. TOX reassess 7/16/87. |

| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) | AR TYPE | % CROP TREATED | RES. VALUE USED IN TAS RUN (ppm) |
|-----------|----------------|--------------------------------------|--------|--------------------|------------------------------|---------|----------------|-------------------------------------|
| 01014DA | GRAPES-RAISINS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 01014DA | GRAPES-RAISINS | 22 COOKED-FRESH-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 03001AA | ALMONDS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03001AA | ALMONDS | 22 COOKED-FRESH-BAKED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03002AA | BRAZIL NUTS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03003AA | CASHIERS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03004AA | CASHIERS | 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03005AA | CHESTNUTS | 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03005AA | FILBERTS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03005AA | FILBERTS | 22 COOKED-FRESH-BAKED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03006AA | HICKORY NUTS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03007AA | MACADAMIA NUTS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03008AA | PECANS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03008AA | PECANS | 22 COOKED-FRESH-BAKED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03009AA | WALNUTS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03009AA | WALNUTS | 22 COOKED-FRESH-BAKED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03010AA | BUTTER NUTS | 23 COOKED-FRESH-BOILED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03011AA | PISTACHIO NUTS | 62 COOKED-FRESH OR FROZEN-BAKED | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 03013AA | BEECHNUTS | 10 RAW-FRESH OR NFS | 1F1132 | 2.00000 | 2.00000 | 7.50 | 0.150000 | |
| 04001DA | APPLES-DRIED | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 04001DA | APPLES-DRIED | 22 COOKED-FRESH-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 04001DA | APPLES-DRIED | 62 COOKED-FRESH OR FROZEN-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 04003DA | PEARS-DRIED | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 04003DA | PEARS-DRIED | 21 COOKED-NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05001DA | APRICOTS-DRIED | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05001DA | APRICOTS-DRIED | 22 COOKED-FRESH-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05002DA | CERRIES-DRIED | 00 NOT SPECIFIED (NO CONSUMPTION) | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05004DA | PEACHES-DRIED | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05004DA | PEACHES-DRIED | 21 COOKED-NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05005DA | PLUMS-PRUNES | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05005DA | PLUMS-PRUNES | 21 COOKED-NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 05005DA | PLUMS-PRUNES | 31 COOKED-FRESH OR CANNED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 328

DATE: 08/05/87

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|--|---|--|---|--|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg LEL= 3.20 ppm ONCO: Class B2 (TOX WOTE) | Increased liver weights, enlarged hepatocytes, no effect on ChE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP Rfd= 0.00800 EPA Rfd= 0.002500 WHO Rfd 0.004000 Type: ADI | Chronic feeding- rat (Core-supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |
| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | RES. VALUE USED IN TAS RUN (ppm) |
| | | | | ANTICIPATED RESIDUE (ppm) | % CROP TREATED |
| 06002DA | BANANAS-DRIED | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0H2477 | 0.50000 | 0.037500 |
| 06002DA | BANANAS-DRIED | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0H2477 | 0.50000 | 0.037500 |
| 06003AA | COCONUT - FRESH | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 06003DA | COCONUT - COPRA | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 06003DA | COCONUT - COPRA | 22 COOKED-FRESH-BAKED | 1F1132 | 2.00000 | 7.50 |
| 06003DA | COCONUT - COPRA | 62 COOKED-FRESH OR FROZEN-BAKED | 1F1132 | 2.00000 | 7.50 |
| 06003JA | COCONUT - WATER | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 06005AA | FIGS | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 9H5209 | 0.50000 | 20.00 |
| 06005AA | FIGS | 22 COOKED-FRESH-BAKED | 9H5209 | 0.50000 | 20.00 |
| 06010DA | PAPAYAS-DRIED | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0H2477 | 0.50000 | 0.037500 |
| 06013DA | PINEAPPLE-DRIED | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0H2477 | 0.50000 | 0.037500 |
| 07001FA | COCA BUTTER | 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 07001SA | CHOCOLATE | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 07001SA | CHOCOLATE | 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 07002AA | COFFEE | 21 COOKED-NFS | 1F1132 | 2.00000 | 7.50 |
| 07003AA | TEA | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.150000 |
| 07006AA | CHICORY | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.150000 |
| 08028AA | MUSTARD SEED | 11 RAW-FRESH-PICKLED, CORNED, OR CURED 21 COOKED-NFS | 1F1132 | 0.50000 | 0.037500 |
| 08028AA | MUSTARD SEED | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 0.50000 | 0.037500 |
| 10010AA | CUCUMBERS | 11 RAW-FRESH-PICKLED, CORNED, OR CURED 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 10010AA | CUCUMBERS | 11 RAW-FRESH-PICKLED, CORNED, OR CURED 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005AA | TOMATOES- WHOLE | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005AA | TOMATOES- WHOLE | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005AA | TOMATOES- WHOLE | 31 COOKED- FRESH OR CANNED | 0E0875 | 0.50000 | 0.030000 |
| 11005JA | TOMATOES- JUICE | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005JA | TOMATOES- JUICE | 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005RA | TOMATOES- PUREE | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005RA | TOMATOES- PUREE | 21 COOKED-NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005RA | TOMATOES- PUREE | 31 COOKED- FRESH OR CANNED | 0E0875 | 0.50000 | 0.030000 |
| 11005RA | TOMATOES- PUREE | 32 COOKED- FRESH OR CANNED-BAKED | 0E0875 | 0.50000 | 0.030000 |
| 11005RA | TOMATOES- PUREE | 51 COOKED- CANNED | 0E0875 | 0.50000 | 0.030000 |
| 11005TA | TOMATOES- PASTE | 21 COOKED- NFS | 0E0875 | 0.50000 | 0.030000 |
| 11005TA | TOMATOES- PASTE | 22 COOKED- FRESH- BAKED | 0E0875 | 0.50000 | 0.030000 |
| 11005TA | TOMATOES- PASTE | 31 COOKED- FRESH OR CANNED | 0E0875 | 0.50000 | 0.030000 |
| 11005UA | TOMATOES- CATSUP | 21 COOKED- NFS | 0E0875 | 0.50000 | 0.030000 |
| 13033AA | LETUCE-LEAFY | 10 RAW-FRESH OR NFS | 0E0875 | 1.00000 | 0.060000 |

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 328

DATE: 08/05/87

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | TOX STATUS | | | |
|---|---|---|--|---|--|------------------|----------------|----------------------------------|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL = 0.0800 mg/kg LEL = 3.20 ppm mg/kg 32.00 ppm | Increased liver weights, enlarged hepatocytes, no effect on CHE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP RfD= 0.00800 EPA RfD= 0.002500 WHO RfD 0.004000 Type: ADI | Chronic feeding- rat (Core-Supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. | | | |
| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) | AR TYPE | % CROP TREATED | RES. VALUE USED IN TAS RUN (ppm) |
| 13020AA | LETTUCE-UNSPEC | 10 RAW-FRESH OR NFS | 0E0875 | 1.00000 | 0.60000 | AS DDVP, NOT NAL | 1.00 | 0.006000 |
| 13045AA | LETTUCE-HEAD | 10 RAW-FRESH OR NFS | 0E0875 | 1.00000 | 0.60000 | AS DDVP, NOT NAL | 1.00 | 0.006000 |
| 13065AA | LETTUCE- HEAD | 21 COOKED-NFS | 0E0875 | 1.00000 | 0.60000 | AS DDVP, NOT NAL | 1.00 | 0.006000 |
| 14013DA | POTATO(WH)-DRY | 10 RAW-FRESH OR NFS | 0H2477 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 14014AA | POTATO(WH)-DRY | 31 COOKED-FRESH OR CANNED | 0H2477 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AA | RADISHES- ROOTS | 10 RAW-FRESH OR NFS | 0E0875 | 0.500000 | 0.500000 | | 1.00 | 0.005000 |
| 15001AB | BEANS-DRY- GRIT NO | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AB | BEANS-DRY- KIDNEY | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AC | BEANS-DRY- KIDNEY | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AD | BEANS-DRY- LIMA | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AD | BEANS-DRY- NAVY | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AD | BEANS-DRY- NAVY | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AE | BEANS-DRY- OTHER | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AE | BEANS-DRY- OTHER | 25 COOKED-FRESH-FRIED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AE | BEANS-DRY- OTHER | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15001AF | BEANS-DRY- PINTO | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15006AA | PEANUTS- WHOLE | 10 RAW-FRESH OR NFS | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15006AA | PEANUTS - WHOLE | 21 COOKED-NFS | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15006AA | PEANUTS- WHOLE | 22 COOKED-FRESH-BAKED | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15007AA | PEAS DRY-GARDEN | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15007AA | PEAS DRY-GARDEN | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15011AB | LENTILS- SPLIT | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15018AA | SUNFLOWER-SEEDS | 10 RAW-FRESH OR NFS | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15020AA | CAROB | 10 RAW-FRESH OR NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15020AA | CAROB | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15022AA | BEANS-DRY-BROAD | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15023AA | BEANS-DRY-PIGEON | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15026AA | SESAME SEEDS | 10 RAW-FRESH OR NFS | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15026AA | SESAME SEEDS | 22 COOKED-FRESH-BAKED | 1F1132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 15028AA | PINENUTS | 10 RAW-FRESH OR NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.150000 |
| 15030AA | BEANS-DRY-HYAC | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15031AA | BIGEYE PEAS-DRY | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15032AA | BEANS-DRY | 21 COOKED-NFS | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 15032AA | BEANS-DRY | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.500000 | 0.500000 | | 7.50 | 0.037500 |
| 16003AA | MUSHROOMS | 10 RAW-FRESH OR NFS | 1E1100 | 0.500000 | 0.300000 | AS DDVP, NOT NAL | 1.00 | 0.003000 |
| 16003AA | MUSHROOMS | 21 COOKED-NFS | 1E1100 | 0.500000 | 0.300000 | AS DDVP, NOT NAL | 1.00 | 0.003000 |
| 16003AA | MUSHROOMS | 31 COOKED-FRESH OR CANNED | 1E1100 | 0.500000 | 0.300000 | AS DDVP, NOT NAL | 1.00 | 0.003000 |
| 16003AA | MUSHROOMS | 53 COOKED-CANNED-BOILED | 1E1100 | 0.500000 | 0.300000 | AS DDVP, NOT NAL | 1.00 | 0.003000 |

ANTICIPATED RESIDUE INFORMATION FOR CASHELL NUMBER 328

DATE: 08/05/87

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | TOX STATUS |
|---|---|---|---|---|--|
| Dichlorvos Gaswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg 3.20 ppm LEL= 0.8000 mg/kg 32.00 ppm ONCO: Class B2 (TOX NOTE) | Increased liver weights, enlarged hepatocytes, no effect on ChE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP Rfd= 0.00500 EPA Rfd= 0.002500 | Chronic feeding- rat (Core-supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |

| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) | AR TYPE | % CROP TREATED | RES. VALUE USED IN TAS RUN (ppm) |
|-----------|------------------|--------------------------------------|--------|--------------------|------------------------------|--------------|----------------|-------------------------------------|
| 24001AA | BARLEY | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.06500 | COOKING DATA | 7.50 | 0.004875 |
| 24002EA | CORN, GRAIN-ENDO | 10 RAW-FRESH OR NFS 21 COOKED-NFS | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002EA | CORN, GRAIN-ENDO | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002EA | CORN, GRAIN-ENDO | 23 COOKED-FRESH-BOILED | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002HA | CORN, GRAIN-BRAN | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002SA | CORN SUGAR | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002SA | CORN SUGAR | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24002SA | CORN SUGAR | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.50000 | COOKING DATA | 7.50 | 0.037500 |
| 24003AA | OATS | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.26000 | COOKING DATA | 7.50 | 0.019500 |
| 24003AA | OATS | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.26000 | COOKING DATA | 7.50 | 0.019500 |
| 24004AA | RICE-ROUGH | 23 COOKED-FRESH-BOILED | 1F1132 | 0.50000 | 0.26000 | COOKING DATA | 7.50 | 0.019500 |
| 24004AA | RICE-ROUGH | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.010000 | COOKING DATA | 7.50 | 0.000750 |
| 24004AB | RICE-MILLED | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.010000 | COOKING DATA | 7.50 | 0.000750 |
| 24004AB | RICE-MILLED | 23 COOKED-FRESH-BOILED | 1F1132 | 0.50000 | 0.010000 | COOKING DATA | 7.50 | 0.000750 |
| 24005AA | RYE-ROUGH | 31 COOKED-FRESH OR CANNED | 1F1132 | 0.50000 | 0.010000 | COOKING DATA | 7.50 | 0.000750 |
| 24005AA | RYE-ROUGH | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24005GA | RYE-GERM | 21 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24005WA | RYE-FLOUR | 22 COOKED-NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24005WA | RYE-FLOUR | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24006AA | SORGHUM | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1132 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 24007AA | WHEAT-ROUGH | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 24007AA | WHEAT-ROUGH | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007AA | WHEAT-ROUGH | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007AA | WHEAT-GERM | 23 COOKED-FRESH-BOILED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007GA | WHEAT-GERM | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 24007GA | WHEAT-GERM | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007GA | WHEAT-GERM | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007HA | WHEAT-BRAN | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007HA | WHEAT-BRAN | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007HA | WHEAT-BRAN | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 24007WA | WHEAT-FLOUR | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007WA | WHEAT-FLOUR | 22 COOKED-FRESH-BAKED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24007WA | WHEAT-FLOUR | 25 COOKED-FRESH-FRIED | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 24012AA | MILLET | 10 RAW-FRESH OR NFS | 1F1132 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 24012AA | MILLET | 21 COOKED-NFS | 1F1132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 25002SA | BEET SUGAR | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |
| 25002SA | BEET SUGAR | 21 COOKED-NFS | 0H2477 | 0.50000 | 0.500000 | COOKING DATA | 7.50 | 0.037500 |

ANTICIPATED RESIDUE INFORMATION FOR CASHELL NUMBER 328

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|---|---|---|---|--|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg LEL= 3.20 ppm mg/kg ppm | Increased liver weights, enlarged hepatocytes, no effect on ChE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP RfD= 0.000800 EPA RfD= 0.002500 WHO RfD 0.004000 Type: ADI | Chronic feeding- rat (Core-Supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |

| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) | AR TYPE | % CROP TREATED | RES. VALUE USED IN TAS RUN (ppm) |
|-----------|------------------|-----------------------------------|--------|--------------------|------------------------------|--------------|----------------|-------------------------------------|
| 25002SA | BEET SUGAR | 22 COOKED-FRESH-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 25003SA | BEET SUGAR | 31 COOKED-FRESH OR CANNED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 25003SA | CANE SUGAR | 10 RAW-FRESH OR NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 25003SA | CANE SUGAR | 21 COOKED-NFS | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 25003SA | CANE SUGAR | 22 COOKED-FRESH-BAKED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 25003SA | CANE SUGAR | 31 COOKED-FRESH OR CANNED | 0H2477 | 0.50000 | 0.50000 | 7.50 | 0.037500 | |
| 26011AA | BUCKWHEAT | 21 COOKED-NFS | 1F132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 26011AA | BUCKWHEAT | 22 COOKED-FRESH-BAKED | 1F132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 26011AA | BUCKWHEAT | 25 COOKED-FRESH-FRIED | 1F132 | 0.50000 | 0.065000 | COOKING DATA | 7.50 | 0.004875 |
| 27002OA | CORN, GRAIN-OIL | 18 PROCESSED OIL | 1F132 | 0.50000 | 0.500000 | | 7.50 | 0.037500 |
| 27003OA | COTTONSEED-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27003WA | COTTONSEED-MEAL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27004AA | FLAX SEED | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27007OA | PEANUTS-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27008AA | SAFFLOWER-SEED | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27008OA | SAFFLOWER-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27009OA | SESAME-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27010OA | SOYBEANS-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27011OA | SUNFLOWER-OIL | 18 PROCESSED OIL | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27015OA | COCONUT-OIL | 10 RAW-FRESH OR NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27015OA | COCONUT-OIL | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27015OA | COCONUT-OIL | 22 COOKED-FRESH-BAKED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27015OA | COCONUT-OIL | 25 COOKED-FRESH-FRIED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 27015OA | COCONUT-OIL | 51 COOKED-CANNED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AA | SOYBEANS-UNSPEC | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AB | SOYBEANS-DRY | 10 RAW-FRESH OR NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AB | SOYBEANS-DRY | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AB | SOYBEANS-DRY | 23 COOKED-FRESH-BOILED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AB | SOYBEANS-DRY | 25 COOKED-FRESH-FRIED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023AB | SOYBEANS-DRY | 31 COOKED-FRESH OR CANNED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MA | SOY-FL, FULL FAT | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MA | SOY-FL, FULL FAT | 22 COOKED-FRESH-BAKED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MA | SOY-FL, FULL FAT | 31 COOKED-FRESH OR CANNED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MB | SOY-FL, LOW FAT | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MC | SOY-FL, DEFAT | 10 RAW-FRESH OR NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MC | SOY-FL, DEFAT | 21 COOKED-NFS | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023MC | SOY-FL, DEFAT | 22 COOKED-FRESH-BAKED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023WC | SOY-FL, DEFAT | 51 COOKED-CANNED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 28023WC | SOY-FL, DEFAT | 53 COOKED-CANNED-BOILED | 1F132 | 2.000000 | 2.000000 | | 7.50 | 0.150000 |
| 50000DB | MILK-NON-FAT SOL | 10 RAW-FRESH OR NFS | 9F788 | 0.020000 | 0.020000 | | 62.60 | 0.012520 |

ANTICIPATED RESIDUE INFORMATION FOR CASHELL NUMBER 328

DATE: 08/05/87

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|---|---|---|---|--|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg LEL= 3.20 ppm 0.8000 mg/kg 32.00 ppm ONCO: Class B2 (TOX NOTE) | Increased liver weights, enlarged hepatocytes, no effect on ChE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP RfD= 0.000800 EPA RfD= 0.002500 WHO RfD 0.004000 Type: ADI | Chronic feeding- rat (Core-Supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |

| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) | AR TYPE | % CROP TREATED | RES. VALUE USED IN TAS RUN (ppm) |
|-----------|------------------|---|--------|-----------------|---------------------------|---------|----------------|----------------------------------|
| 50000DB | MILK-NON-FAT SOL | 21 COOKED - NFS | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 50000DB | MILK-NON-FAT SOL | 51 COOKED-CANNED | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 50000FA | MILK-FAT SOLIDS | 10 RAW-FRESH OR NFS | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 50000FA | MILK-FAT SOLIDS | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 50000SA | MILK SUG (LACT) | 51 COOKED-CANNED | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 50000SA | MILK SUG (LACT) | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 62.60 0.012520 |
| 53001BA | BEEF-MEAT BYP | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001BA | BEEF-MEAT BYP | 26 COOKED-FRESH-PICKLED,CORNED,OR CURED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001BB | BEEF-OTH ORGAN | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001BB | BEEF-OTH ORGAN | 51 COOKED-CANNED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001DA | BEEF-DRIED | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001FA | BEEF-FAT | 10 RAW-FRESH OR NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001FA | BEEF-FAT | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001FA | BEEF-FAT | 22 COOKED-FRESH-BAKED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001FA | BEEF-FAT | 23 COOKED-FRESH-BOILED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001FA | BEEF-FAT | 24 COOKED-FRESH-BROILED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001KA | BEEF-KIDNEY | 25 COOKED-FRESH-FRIED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001LA | BEEF-LIVER | 25 COOKED-FRESH-FRIED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001LA | BEEF-LIVER | 31 COOKED-FRESH OR CANNED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001MA | BEEF-LEAN | 10 RAW-FRESH OR NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001MA | BEEF-LEAN | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001MA | BEEF-LEAN | 22 COOKED-FRESH-BAKED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001MA | BEEF-LEAN | 23 COOKED-FRESH-BOILED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53001MA | BEEF-LEAN | 24 COOKED-FRESH-BROILED | 9F0788 | 0.020000 | 0.020000 | | | 16.20 0.003240 |
| 53002BA | GOAT-MEAT BYP | 00 NOT SPECIFIED (NO CONSUMPTION) | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002BB | GOAT-OTH ORGAN | 00 NOT SPECIFIED (NO CONSUMPTION) | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002FA | GOAT-FAT | 23 COOKED-FRESH-BOILED | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002FA | GOAT-FAT | 25 COOKED-FRESH-FRIED | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002KA | GOAT-KIDNEY | 00 NOT SPECIFIED (NO CONSUMPTION) | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002LA | GOAT-LIVER | 00 NOT SPECIFIED (NO CONSUMPTION) | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002MA | GOAT-LEAN | 23 COOKED-FRESH-BOILED | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53002MA | GOAT-LEAN | 25 COOKED-FRESH-FRIED | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005BA | SHEEP-MEAT BYP | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005BB | SHEEP-OTH ORGAN | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005FA | SHEEP-FAT | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005KA | SHEEP-KIDNEY | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005LA | SHEEP-LIVER | 00 NOT SPECIFIED (NO CONSUMPTION) | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |
| 53005MA | SHEEP-LEAN | 21 COOKED-NFS | 9F0788 | 0.020000 | 0.020000 | | | 100.00 0.020000 |

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 328

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|--|---|---|---|---|--|
| Dichlorvos Caswell #28 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL = 0.0800 mg/kg 3.20 ppm LEL = 0.8000 mg/kg 32.00 ppm ONCO: Class B2 (TOX NOTE) | Increased liver weights, enlarged hepatocytes, no effect on CHE activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP RfD= 0.000800 EPA RfD= 0.002500 WHO RfD 0.004000 Type: ADI | Chronic feeding- rat (Core-supplementary) Reproduction (Core-Supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. TOX reassess 7/16/87. |
| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE (ppm) | ANTICIPATED RESIDUE (ppm) |
| | | | | AR TYPE | % CROP TREATED |
| 53005MA | SHEEP-LEAN | 31 COOKED-FRESH OR CANNED | 9F0788 | 0.020000 | 0.020000 |
| 53006BA | PORK-MEAT BYP | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006BB | PORK-OTH ORGAN | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006BB | PORK-OTH ORGAN | 26 COOKED-FRESH-PICKLED, CORNED, OR CURED | 9F0788 | 0.100000 | 100.00 |
| 53006FA | PORK-FAT | 10 RAW-FRESH OR NFS | 9F0788 | 0.100000 | 100.00 |
| 53006FA | PORK-FAT | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006FA | PORK-FAT | 23 COOKED-FRESH-BOILED | 9F0788 | 0.100000 | 100.00 |
| 53006FA | PORK-FAT | 25 COOKED-FRESH-FRIED | 9F0788 | 0.100000 | 100.00 |
| 53006FA | PORK-FAT | 26 COOKED-FRESH-PICKLED, CORNED, OR CURED | 9F0788 | 0.100000 | 100.00 |
| 53006KA | PORK-KIDNEY | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006LA | PORK-LIVER | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006LA | FISH, FIN-SLT-DRY | 25 COOKED-FRESH-FRIED | 9F0788 | 0.100000 | 100.00 |
| 53006MA | PORK-LEAN | 21 COOKED-NFS | 9F0788 | 0.100000 | 100.00 |
| 53006MA | PORK-LEAN | 25 COOKED-FRESH-FRIED | 9F0788 | 0.100000 | 100.00 |
| 53006MA | PORK-LEAN | 26 COOKED-FRESH-PICKLED, CORNED, OR CURED | 9F0788 | 0.100000 | 100.00 |
| 53017DA | FISH, FIN-SLT-DRY | 12 RAW-FRESH-DRYED | 9H2477 | 0.500000 | 7.50 |
| 53017DA | FISH, FIN-SLT-DRY | 21 COOKED-NFS | 9H2477 | 0.500000 | 7.50 |
| 55008BA | TURKEY-BYP | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55008BA | TURKEY-BYP | 26 COOKED-FRESH-PICKLED, CORNED, OR CURED | 1F1059 | 0.050000 | 100.00 |
| 55008LA | TURKEY ORGAN | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55008LA | TURKEY ORGAN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.050000 | 100.00 |
| 55008MA | TURKEY W/O SKIN | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55008MA | TURKEY W/O SKIN | 31 COOKED-FRESH OR CANNED | 1F1059 | 0.050000 | 100.00 |
| 55008MA | TURKEY W/O SKIN | 62 COOKED-FRESH OR FROZEN-BAKED | 1F1059 | 0.050000 | 100.00 |
| 55008MB | TURKEY+SKIN | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55008MB | TURKEY+SKIN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.050000 | 100.00 |
| 55008MC | TURKEY-UNSPEC | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55013BA | POULTRY, OTH-BYP | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1059 | 0.050000 | 100.00 |
| 55013LA | POULTRY ORGAN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.050000 | 100.00 |
| 55013MA | POULTRY, OTHER | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55014AA | EGGS-WHOLE | 10 RAW-FRESH OR NFS | 1F1059 | 0.050000 | 100.00 |
| 55014AA | EGGS-WHOLE | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55014AA | EGGS-WHOLE | 22 COOKED-FRESH-BAKED | 1F1059 | 0.050000 | 100.00 |
| 55014AA | EGGS-WHOLE | 23 COOKED-FRESH-BOILED | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 25 COOKED-FRESH-FRIED | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 10 RAW-FRESH OR NFS | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 21 COOKED-NFS | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 22 COOKED-FRESH-BAKED | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 62 COOKED-FRESH OR FROZEN-BAKED | 1F1059 | 0.050000 | 100.00 |
| 55014AB | EGGS-WHITE ONLY | 81 COOKED-FROZEN | 1F1059 | 0.050000 | 100.00 |

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 328

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| CHEMICAL | STUDY TYPE | EFFECTS | REFERENCE DOSES | DATA GAPS/COMMENTS | STATUS |
|---|---|---|--|---|--|
| Dichlorvos Caswell #328 CAS No. 62-73-7 A.I. CODE: 084001 CFR No. 180.235 | 2yr feeding- dog NOEL= 0.0800 mg/kg 3.20 ppm LEL= 0.8000 mg/kg 32.00 ppm ONCO: Class B2 (TOX NOTE) | Increased liver weights, enlarged hepatocytes, no effect on CHT activity. Evidence of oncogenicity in rats (pancreas, leuk.) and mice (stomach). | PADI 100 OPP Rfd= 0.00800 EPA Rfd= 0.002500 WHO Rfd 0.004000 Type: ADI | Chronic feeding- rat (Core-supplementary) Reproduction (Core-supplementary) Teratology- rat | TOX complete 8/15/86. ORD verified 9/16/86. WHO last reviewed 1977. Tox reassess 7/16/87. |
| FOOD CODE | FOOD | FOOD FORM | PET.# | TOLERANCE RESIDUE (ppm) | ANTICIPATED RESIDUE (ppm) |
| | | | | AR TYPE | % CROP TREATED |
| 55014AC | EGGS-YOLK ONLY | 10 RAW-FRESH OR NFS | 1F1059 | 0.05000 | 0.05000 |
| 55014AC | EGGS-YOLK ONLY | 21 COOKED-NFS | 1F1059 | 0.05000 | 0.05000 |
| 55014AC | EGGS-YOLK ONLY | 25 COOKED-FRESH-FRIED | 1F1059 | 0.05000 | 0.05000 |
| 55014C | EGGS-YOLK ONLY | 31 COOKED-FRESH OR CANNED | 1F1059 | 0.05000 | 0.05000 |
| 55015BA | CHICKEN-BYP | 00 NOT SPECIFIED (NO CONSUMPTION) | 1F1059 | 0.05000 | 0.05000 |
| 55015LA | CHICKEN-ORGAN | 21 COOKED-NFS | 1F1059 | 0.05000 | 0.05000 |
| 55015LA | CHICKEN-ORGAN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.05000 | 0.05000 |
| 55015LA | CHICKEN-ORGAN | 26 COOKED-FRESH-PICKLED, CORNED, OR CURED | 1F1059 | 0.05000 | 0.05000 |
| 55015MA | CHICKEN-W/O SKIN | 21 COOKED-NFS | 1F1059 | 0.05000 | 0.05000 |
| 55015MA | CHICKEN-W/O SKIN | 22 COOKED-FRESH-BAKED | 1F1059 | 0.05000 | 0.05000 |
| 55015MA | CHICKEN-W/O SKIN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.05000 | 0.05000 |
| 55015MA | CHICKEN-W/O SKIN | 31 COOKED-FRESH OR CANNED | 1F1059 | 0.05000 | 0.05000 |
| 55015MA | CHICKEN-W/O SKIN | 53 COOKED-CANNED-BOILED | 1F1059 | 0.05000 | 0.05000 |
| 55015MB | CHICKEN+SKIN | 21 COOKED-NFS | 1F1059 | 0.05000 | 0.05000 |
| 55015MB | CHICKEN+SKIN | 25 COOKED-FRESH-FRIED | 1F1059 | 0.05000 | 0.05000 |